



# Buzzwords ...

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..... the newsletter for National Beekeepers' Association members

## *In this issue...*

## Buzzwords No 58 November 1993

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- \* NEW BOOK OUT (HONEST!)
- \* AFB FUNGUS CONTROL



"FINE, THE HONEY BEE POLLINATES \$10 BILLION  
WORTH OF CROPS A YEAR, BUT WHAT'S ITS FIREPOWER  
AND MACH SPEED AND CAN IT BE DETECTED BY RADAR?"



## FROM THE PRESIDENT

At a special meeting on October 5, the NBA Executive was faced with several difficult decisions related to our association's budget for the coming year. It was decided that the 1994 hive levy would remain at \$1.61 per hive, and that this would be proportioned, with 50 cents going to pay for the AFB Disease Control Programme, 35 cents for the Marketing Programme, and 76 cents for administration. The increased budget for administration reflects the anticipated extra funds needed to replace our existing secretarial services and the cost of collecting unpaid hive levies.

The decision was made to cease publication of the current version of the *New Zealand Beekeeper* following the November 1993 (summer) issue. We realise that members will be disappointed with this outcome, and I can assure you that it was not an easy decision to make. The *New Zealand*

*Beekeeper* has a long history and has been a source of useful information for both commercial and domestic beekeepers alike. However, to have continued to produce the *New Zealand Beekeeper* in magazine style would have required an increase in the hive levy or the use of association reserves. The executive felt that neither of these alternatives was acceptable. Instead, *Buzzwords* will be enlarged, and renamed the "*New Zealand Beekeeper*", beginning with the February 1994 issue.

Elsewhere in this issue you will see an advertisement for the position of NBA Executive Secretary. It is executive's intention to interview suitable candidates in early December, and have either a person or organisation appointed to carry out these duties when the Pork Industry Board's contract ends at the end of December 1993. As you will notice from the advertisement, we are hoping to have this person also take over the duties of editor of the new version of the *New Zealand Beekeeper*.

Frances Trewby, President

## FROM THE BRANCHES

The field day held by the Hawkes Bay branch last month proved very successful, according to secretary Ron Morison. Good press coverage attracted a number of both members and beginners. On Saturday, November 6, members will meet at Ashcroft's Honey House in Havelock North for the annual branch diseaseathon. All beekeepers are urged to join in. The next meeting of the branch will be on Tuesday, November 9, beginning at 7.30 pm. Topics for discussion include the diseaseathon results and plans for the Christmas function.

The Canterbury branch will be holding its annual Field Day and Picnic on Sunday, November 21, starting at 10:30 am. Venue will be the Doylston Domain, 30km south of Christchurch on the Leeston-Southbridge Highway. Activities include workshops on queen rearing and swarm control, and discussions on "Life after Beekeeping" (is there any? -ed.), new ideas, and bee pests and diseases. They will also be holding something called a "Boot Auction" (I wonder what that is? - ed.). Members and friends are urged to come along and enjoy a friendly and informative day.

The Auckland branch has taken an important initiative to help facilitate exports of bulk bees. Branch members have moved all of their apiaries from within a 2km radius of the airport and are about to do a search for ferals and unregistered hives. This should really help in reducing the chances of "hitchhiker" bees, which can cause problems with quarantine clearance for shipments at transhipment points and when the packages arrive at their country of destination.

## BIOSECURITY ACT: GOOD, BAD, AND "MAKES YOU WONDER"

Most beekeepers throughout the country probably don't realise that New Zealand no longer has an Apiaries Act. It was replaced on October 1 by an omnibus piece of legislation called the Biosecurity Act. In a previous edition of *Buzzwords* we outlined the NBA submission when the act was being considered as a bill by Parliament's Primary Production Select Committee (*Buzzwords* 49). Later, we covered the growing concern, expressed by Federated Farmers as well as our own association, that the bill, if enacted unchanged, could lead to some exotic diseases (especially those affecting smaller industries) not being properly controlled (see *Buzzwords* 52).

Now that the bill has been made law (it was rushed through parliament just before it rose for the election), some of our association's earlier concerns seem to have been met. But there are still substantial problems in the legislation (and perhaps also its implementation) which should be a strong cause for concern for almost everyone in New Zealand agriculture.

First, for the good news. There is no doubt that the legislation will make it much easier for our association to design a pest management strategy for American foulbrood control which will suit our own purposes. No longer will we

have to just rely on Apiaries Act provisions for dealing with the disease, and the striking of a disease control/eradication levy amongst all those directly affected (rather than just beekeepers with 50 hives or more) will be much easier than with the old Hive Levy Act (due to come to an end on January 1, 1996). As well, most of the important Apiaries Act provisions (including apiary registration, disease declarations, powers to deal with endemic and exotic diseases, and procedures for dealing with abandoned apiaries) have been retained, at least in the meantime. The fishhook, however, is that unless these provisions are included in pest management strategies proposed by our association or a government minister, all remaining Apiaries Act provisions will expire at the end of June 1996.

With the strong resolve of the industry (as expressed in the recommendations of the NBA Pest Management Committee) to deal more effectively with American foulbrood, retaining and even strengthening our ability to deal with this important endemic disease hopefully shouldn't be too much of a problem. The committee is already working on an American foulbrood pest management strategy for implementation under the new act. Hopefully a draft of that strategy will be available prior to next conference.

The problem lies (as we have said all along) with exotic diseases, and more importantly with who's going to pay. Traditionally the maintenance of agricultural security, both at the borders and when a new disease has been found, has been the responsibility of the community-at-large. From comments made by a number of media sources recently, it would seem that most people believe this will continue to be so. Even the *Main Agricultural Newsletter*, an important news source we often quote in these pages, said in a recent edition that "(the new act) simply restates the powers present in earlier acts, so you won't notice too much difference in obligations or limitations on your rights and activities."

Now maybe we're paranoid, but at least in the case of exotic bee diseases such as parasitic mites, EFB, and the Africanised honey bee (and we suspect things like fruit fly and other diseases as well), the main difference we may soon notice is that if we don't pay for it, the government won't likely continue to help keep our exotic diseases out or deal with them if they ever show up on our shores.

We don't believe our paranoia is unfounded, especially in light of a recent letter we have seen on the NZ beekeeping industry written by Associate Minister of Agriculture Denis Marshall to Parliamentary Select Committee member (and speaker at last year's conference) Margaret Moir. In the letter, Mr. Marshall makes it very clear that "exotic disease control programmes are the responsibility of the industry. The industry is the principal recipient of the value of the programme and it is right they and not the government should pay for it."

Now this sort of approach is bad enough, but what could be even more galling to a small industry like ours is the fact that such a high-minded, "free market" philosophy probably won't be applied fairly across the board. Rumour has it that the big industries of sheep, dairy, and beef won't be



exposed to the same "chill winds" of market forces. The Emergency Disease and Pest Response system for foot and mouth disease, now funded by government, is likely to continue in more or less its present form.

The act also has a few nonsensical bits, as you would expect in a huge piece of legislation which tries to replace so many different acts (the Plants Act, the Animals Act, the Agricultural Pest Destruction Act, the Noxious Plants Act, and the Dog Control and Hydatids Act, as well as our own). As an example, even though the NBA submission pointed out the error in the select committee stage, the new act still leaves out all mention of section 7 of the Apiaries Act, the part which says you have to keep bees in moveable frame hives. It is more than a little ironic that this provision was the prime reason for the creation of an Apiaries Act in the first place, way back in 1905. Let's just hope this error will be rectified in some future amendment to the Biosecurity Act.

We also understand that just after the bill's passage, at the beginning of the NBA diseaseathon period, MAF officials came aware of the fact that the new act had done away with all Apiaries Act provisions pertaining to temporary inspectors. Permanent inspectors (such as AAO's) had their powers transferred under the Biosecurity Act, but over 250 NBA inspector volunteers were left in limbo until a solution could be ironed out. MAF Quality Management negotiated with the Regulatory Authority, and our inspectors were given permission at the last moment to be appointed as "accredited persons" under the new act.

## FROM THE MARKETING COMMITTEE

Logo - the New Zealand honey industry's logo is taking shape. One important consideration is that the design can't be too "radical". The logo is going to have to appeal to a lot of different groups of people, and will be used in countless types of situations. The most important element will be the name used to describe both the logo and New Zealand honey. By next month's *Buzzwords* a trademark search will have been completed and then the name protection process will get under way. Then we'll be able to publish it for members.

Quality Standards - work continues on the New Zealand Honey Quality Standards. Members of the Marketing Committee are individually assessing the draft proposal and we intend to have the standards completed by the end of November. When that's done, we'll set about promoting the concept of the standards with both beekeepers and the New Zealand food ingredient industry and food retailers.

Once our manufacturing and retail customers start looking for quality in honey, and not just a chance to knock you down on price, then we will be able to say that the honey industry has taken an important new step towards product differentiation. The quality awareness process will start before Christmas.

Word of the Month - now, on to that word referred to in last month's *Buzzwords*....CHROMIUM. The Faculty of Consumer and Applied Sciences at Otago University (formerly the Home Science Faculty) has as one of its

recommended references the 1992 edition of David Coory's book, *Stay Healthy by Supplying What's Lacking in Your Diet*.

The book has an article on chromium. I can't reproduce it all here, and please don't take this brief review as all there is on the subject. You'll need to get a copy of the article for yourself (especially if you intend mentioning it to customers). But in summary, it appears that "chromium is needed by our bodies to process the sugar and alcohol we consume. Fruit normally contains sufficient chromium to process the sugar contained within the fruit; SO DOES HONEY (my caps). Ironically, the raw sources of refined sugar are some of the best sources of chromium, but all is lost during refining."

The book goes on to say that chromium "assists in the absorption and regulation of sugar in our blood...assists in the processing of alcohol...helps regulate cholesterol levels...and assists in the manufacture of natural high density cholesterol and insulin."

The book's "Health Hint" is: "For those who have a sweet tooth, the safest way to satisfy it is with sweet fruit or honey, both of which contain small amounts of chromium."

I don't know about you, but reading that sure makes my blood sugar levels get excited. I think I'll just go and have a quiet glass of Marlborough sauvignon blanc wine and a piece of Marlborough edam cheese...with Marlborough honey, of course, to help regulate the alcohol and the cholesterol. What magic stuff this honey (is turning out to) be!

Bill Floyd, Honey Marketing Committee

## NEW BEE BOOK OUT (HONEST!)

We try to be up with the play here at *Buzzwords*, reporting to you fast-breaking news items in the world of bees. But sometimes being "hot off the press" backfires, although usually not with too embarrassing a result.

Case in point: the new, revised edition of *Practical Beekeeping in New Zealand*, written by Andrew Matheson, former AAO and now director of the International Bee Research Association (IBRA). Way back in September 1992 (*Buzzwords* 45), we published a small article saying this book would be available within a month, and commenting that it would make a welcome return for an important beekeeping industry resource which had unfortunately been out of print.

Several observant readers wrote to us soon after saying that they weren't able to find the new version in any book stores, and after a further phone call to the publisher (GP Publications) we had to publish a second article (*Buzzwords* 47) saying that because of production delays, the book wouldn't be out until at least 1993.

As you can imagine, we decided to keep our heads down at that point, waiting until somebody actually found *Practical Beekeeping* on the bookshelves before going into print again. Well, the other day one of us really did see it at the local Whitcoull's, so I guess its finally safe to pop up again and say "it's here!"



The timing by GP Publications is actually quite good, since they were able to distribute it to retailers right at the start of the new beekeeping season. The book should be of real benefit to newcomers to the industry and experienced beekeepers alike. And the new edition does have a number of additions and improvements, compared to the previous version. As Andrew says in the preface, "since the book has been out of print, I have prepared a fully revised edition which takes into account changes in scientific knowledge and current beekeeping practice, and, I hope, developments in my own beekeeping experience".

Chief among these changes are a revised segment on bee colony activities and behaviour (with greater emphasis on the overlap in age-related tasks), a greatly enlarged description of paraffin dipping, and a new section on European foulbrood. This last addition is very important, since awareness of EFB symptoms is likely to be the key in any successful emergency response if New Zealand gets the disease.

It was also really good to see prominent pictures of gorse and willow in the section on nectar and pollen. The species are two of New Zealand beekeeping's most important spring sources, and they are often denigrated as simply noxious weeds in many New Zealand books.

The new edition also has a revised and enlarged section on further sources of information, including a write-up on our association, and even a mention of *Buzzwords* itself. With that sort of flattery, we could hardly not recommend it to everyone!

*Practical Beekeeping in New Zealand* (2nd edition) is available from most good book stores, bee supply houses, and the NBA promotional supply outlet (Ashcrofts Honey House, Martin Place, Havelock North). It is also available from Cliff Van Eaton, the IBRA representative for New Zealand, c/- MAF, Private Bag, Tauranga. The book has a recommended retail price of \$34.95 (incl. GST). Lets hope this new edition of our very own book on beekeeping stays in print for many years to come.

## DONOVAN RESPONDS

The following article was sent to us by Dr. Barry Donovan, formally the DSIR and then Landcare scientist in charge of the wasp parasite programme:

"In *Buzzwords* 55 (August 1993), a report of the talk given by Dr. Oliver Sutherland, the general manager of the Weeds and Pest Divisions of Landcare Research Ltd, said "that with the restructuring of science a little over a year ago, wasp researchers from a number of departments were brought together to work as a team in Landcare Research." Your report was correct, but what it didn't say was that within four months Dr. Sutherland had declared me (the longest serving wasp researcher) redundant, because of uncertainty of funding to support my work, and that 12 months later he withdrew funding for wasp research from Dr. Jenny Dymock. Both Dr. Dymock and myself were proactively engaged in the acquisition of insect enemies for biological control of wasps. We were the only scientists doing so.

Your report also said that "clearly the establishment of the (parasitic) wasp hadn't been successful...After computer modelling of the parasite populations, the group came to the conclusion that even though this had been the most widely distributed biological control release in New Zealand history, it will never reach the levels necessary to fully control either the German or common wasp."

The facts are that the parasitoid has been released at about 800 sites throughout most of New Zealand. Opinions differ as to how many wasp nests should be inspected at any one site before the establishment (or otherwise) of the parasitoid can be determined with any degree of certainty. If the number of nests is set at say 50, then at only at 6 sites have more than 50 nests been inspected in any one year. At 2 of these, the parasitoid is established. On a proportional basis, then, of the 800 sites, the parasitoid may be established at as many as 266 sites. Even if the number of nests that need to be examined is reduced to 20, then the parasitoid could be established in as many as 73 sites. An analysis of biocontrol attempts against insects and weeds in New Zealand shows that only 1 in every 3 species of insects that are introduced actually establish. So by this measure, far as establishment is concerned, the parasitoid is very successful.

As the scientist who initiated the biological control effort back in 1979, it was never my belief or expectation that one parasitoid could be expected to fully control wasps. There are up to a dozen other wasp enemies overseas that could be evaluated for introduction. Following my liberation from Landcare Research, the Foundation for Research, Science and Technology (FORST) has seen fit to fund me for one third of my time for three years to carry out research on the evaluation of new wasp enemies. The foundation is also funding me for another one third of my time for three years to complete a revision of the native bees of New Zealand. The remaining third of my time is free for other work.

I am still based at Lincoln where, on a user-pay basis, the Crop and Food CRI is providing all services and facilities. I believe that the progress achieved with the wasp parasite that is established and which is killing wasps at two sites shows that introducing new wasp enemies does hold the hope that wasp numbers can be reduced. Beekeepers can be assured that I am pursuing the biological control of wasps with vigour.

Dr. Sutherland also informed your annual conference that Landcare Research should have a new wasp control bait available to the public next summer. Subsequently, this received nationwide TV, radio and newspaper coverage. Beekeepers (and others) should be aware, however, that research by Landcare wasp ecologists suggests that in the year following the poisoning of wasps with baits, there are more wasps than ever - up to twice as many (see *Wasp Times*, No. 18, August 1993)."

## MORE MANUKA PUBLICITY

The story of manuka honey's special antibiotic properties, which we have chronicled during the last two years in *Buzzwords*, has been given another world-wide publicity



boost, thanks to a recent article on the subject in the respected international beekeeping journal *Bee World* (vol. 74, no. 3). The article describes how biochemist Dr. Peter Molan's sideline interest in honey's properties during the last ten years resulted in the discovery of a non-peroxide antibiotic substance that works against even drug-resistant bacteria such as MRSA (methicillin-resistant *Staphylococcus aureus*) and *Helicobacter pylori*, the organism which is thought to be the major cause of stomach ulcers.

The article points out that even though the results of clinical trials testing the honey against stomach ulcers are not yet known, sales of manuka have been increasing dramatically. According to the article, although manuka was "once termed a 'problem honey' and difficult to sell because of its strong flavour and dark colour, it has increased in price to equal the return for table-grade honey, and is now a premium honey with prices to the beekeeper almost 50% higher than those for the best light grades."

The author of the article, IBRA director Andrew Matheson, believes future prospects for the honey look good, and that prices could increase even further as a result of the Marketing Plan's promotion of manuka's special properties. Andrew makes it clear that the success story of New Zealand honey has come about because of a number of important factors. These include the dedication and interest of individual researchers; the support for the research from beekeepers and AAOs who collected samples over a number of years; a substantial research grant from beekeeping industry trust funds and significant donations from individual beekeepers; and the coordinated marketing plan by the NBA to "help translate public awareness of manuka honey's unique properties into increased sales."

## MARKETING LEVY LIFTED

Following the special meeting of the NBA Executive on October 5, it was "resolved to rescind the decision of the 7th and 8th of September in respect of the 30 cent marketing levy for 1994. It was then agreed that the marketing levy for 1994 be 35 cents."

As there has been no reduction in the overall Hive Levy for next year (ie, \$1.61 per hive), this decision effectively means that 15 cents allocated to marketing this year has been moved across to meet an anticipated increase in administration costs for 1994.

While this 5 cent increase in marketing allocation is welcome, your committee continues to believe that 50 cents per hive for 1994 was accepted by NBA members through branch voting on a remit to the 1993 Conference. The Marketing Committee does, of course, accept the decision of the executive on this matter - we have no other alternative at this stage. Appropriate reviews of expenditure will be made as and when next year's marketing work is planned.

However, as the NBA Marketing Committee Chairman I will continue to advocate the best possible level of financial support for the association's marketing efforts. The committee considers this is part of its function and, as mentioned in last month's *Buzzwords*, we have included

plans to find alternative methods of funding for the committee's work on behalf of the industry.

The form of this funding base has yet to be finally decided, but initial discussions have centred around a product, rather than producer-based levying system. The terms of the Commodities Levy Act require a direct relationship between the purposes for a levy and the product or item from which it is to be collected.

There are a number of sound reasons for this approach, not the least of which being that the continued funding of a promotional activity will depend on the promotion's success. That is, the more product that is sold as a result of the promotional activity, the more which can be collected to further enhance the promotion.

Not only will such a system mean a more direct line between products and their promotion; it will also largely remove the "political" complications that can arise from an indirect form of support such as the Hive Levy represents. In other words, it is more appropriate to have a levy for honey marketing based upon honey than to have it based on the hives which produce the honey.

The NBA Marketing Plan clearly states that the initial promotional efforts of the industry should go into honey. The committee intends keeping a watching brief on other beekeeping products and services such as pollination, queen bees, and other hive products. If it is considered appropriate, marketing activities can be further extended into these areas. But it should be realised that a separate levy could be required to fund such promotion.

In the future, industry-level marketing may be based on several levies specifically tagged to certain identifiable "products", and not just honey. In the case of honey promotion, a levy may be based on the kilos of honey produced, the amount packed or exported, the number of honey containers manufactured, or even how many labels are applied. The point is that the criteria for such a levy should be whatever is most appropriate, most workable, and above all, most equitable.

No system will be perfect. There will always be problems and, of course, always some individuals who will attempt to avoid or abuse the system. This is already apparent with the existing Hive Levy. Still, the Marketing Committee is committed to setting up an alternative funding arrangement for marketing promotion. In the meantime, however, we need to have the present levy to carry out promotion work and other marketing activities on your behalf.

You may be assured the Marketing Committee will continue to make every effort to ensure that funds are applied effectively within the constraints placed upon us. You may be equally assured that we will continue to put forward the strongest possible case for continued industry support for marketing. As a committee we believe there is great untapped potential within the beekeeping industry for a successful and profitable marketing future.

Finally, on behalf of the committee I would like to express our appreciation to those branches and individuals who



#### HONEY INDUSTRY TRUST FUND

Applications for funding close on 15 August and 15 February. Forms available from PO Box 4048, Wgtn.

contacted the executive to give an opinion on the reduction in the marketing levy. Your support and/or criticism is always welcome, and helps to ensure that the voluntary efforts made by committee members will continue towards achieving the aims of your Marketing Plan.

Alan McCaw, Marketing Committee Chairman

## EXECUTIVE SECRETARY VACANCY

The following job vacancy has been posted by the National Beekeepers Association, and will be advertised in the four main daily newspapers this month:

### Executive Secretary

To manage the day to day administration activities of the National Beekeepers Association of New Zealand. It is preferable, but not essential, that applicants have an apiculture background. Experience in publication and editing would be an advantage. This could be a salaried position, or services could be provided under contract/tender. Preferably the applicant would need to provide, or have available, office facilities.

Interested persons, or organisations, are invited to apply to:

The Executive Secretary  
National Beekeepers' Association of New Zealand, Inc.  
PO Box 4048  
WELLINGTON

from whom terms of reference/job description can be obtained. Applications close 15 November 1993.

## FOULBROOD FUNGUS CONTROL

Beekeepers in New Zealand often mention that they seldom find AFB in hives with cases of chalkbrood. Now comes evidence from America which explains why this might be so. In an article in the August 1993 of *The Speedy Bee*, Dr. Hachiro Shimanuki, head of the USDA's Bee Research Laboratory at Beltsville, Maryland, is quoted as saying that the fungus causing chalkbrood (*Ascospaera apis*) may lead to a "natural control" for both American and European foulbrood.

The natural remedy is a common unsaturated fatty acid called linoleic acid, and is found in oils produced from peanuts, corn, soybeans, and other vegetables. Dr. Shimanuki's team found that linoleic acid is also produced by chalkbrood. In laboratory tests, linoleic acid inhibited the growth of the bacteria which cause both types of foulbrood in bees.

According to the report, the surprise discovery didn't happen overnight. Instead, it came as a result of over a decade of research on curious trends in New Jersey honey bees.

From the 1960's to 1988, scientists at the lab were engaged in a study of controls for European foulbrood disease. The disease was widespread in areas where honey bees were used to pollinate blueberries and cranberries.

"During that time," Dr. Shimanuki said, "researchers also discovered an increase in chalkbrood, which by 1983 had become widespread in southern New Jersey. But samples of diseased bees analyzed at our lab showed that during 1980 to 1990 European foulbrood declined drastically, and was hard to find in the area by the late 1980's."

Further tests confirmed that the chalkbrood fungus inhibited both types of foulbrood, and entomologists at the lab later isolated and purified the substance involved.

Currently in the US, the only antibiotic approved by the US Food and Drug Administration for the control of American and European foulbrood is oxytetracycline. However, according to Dr. Shimanuki, "we are concerned that these diseases could eventually develop a resistance to that antibiotic, so we need new, natural biological controls."

Interestingly, Dr. Shimanuki also makes a very surprising statement in the article, especially in light of the now widespread problems in the States caused by Varroa and tracheal mites. According to Dr. Shimanuki, "American foulbrood is considered the biggest disease threat to US honey bees, causing an estimated US\$8 million in damage each year." (That's close to the total farm gate income from honey produced by the entire NZ beekeeping industry last year! - ed.)

The report seems like exciting news in the war against foulbrood. However, several important points need to be made. The first is that while the new substance is a "natural" antibiotic, that doesn't necessarily mean that it would be safe to use in association with pure food products like honey. Indeed, there are a whole range of "naturally" produced antibiotics used in animal production, and for that matter human medicine, and almost all of them are still strictly controlled.

The second point is that even though antibiotics have been used extensively in US beekeeping for a number of years, those antibiotics certainly haven't solved the problem of foulbrood and its decimating effect on honey bees. If Dr. Shimanuki's figures are correct, it should be obvious to everyone that proper inspection and sound management policies are still the key to the disease's total control.

### **BUZZWORDS IS ...**

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